BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants	:	Daman, et al.
Serial No.	:	09/767,126
Filed	:	January 22, 2001
For	:	REAL TIME ELECTRONIC COMMERCE TELECOMMUNICATION
	:	SYSTEM AND METHOD
Examiner	:	Felten, Daniel S.
GAU	:	3693

October 11, 2007

Hon. Commissioner for Patents
P.O. Box 1450
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REVISED APPEAL BRIEF PURSUANT TO 37 C.F.R. § 41.37

In response to the Final Office Action dated October 20, 2006, and the Notice of Appeal dated March 20, 2007, and the Notice of Panel Decision from Pre-Appeal Brief Review dated May 23, 2007, the time for response to which expires June 23, 2007, applicants herewith submit their Appeal Brief pursuant to 37 C.F.R. 41.37.

(i) Real party in interest.

The real party interest is the Assignee, Quik Auctions, Inc., 1200 West State Road 434, Suite 300, Longwood FL 32750, assignee of the invention. A copy of the assignment is attached hereto as Appendix A.

(ii) Related appeals and interferences.

There are no related appeals or interferences, which are related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(iii) Status of claims.

Claims 1-37 are in the application.

Claims 1-37 are rejected.

The rejection of claims 1-37 is appealed.

(iv) Status of amendments.

A proposed amendment to the claims was filed January 22, 2007. Entry of this amendment was denied in the Advisory Action dated March 6, 2007.

(v) Summary of claimed subject matter.

The Internet and its underlying protocols do not guaranty packet delivery, and therefore the art has devised various means for ensuring and/or confirming delivery of the information intended to be conveyed. Likewise, the Internet and its underlying protocols do not guarantee that packets are not delayed or reordered in transit, and the timestamp (time of transmission) is a self-reported code which may be inaccurate. Therefore, in seeking to conduct a real-time auction over the Internet in which bid time and order are important, steps should be taken to ensure that artifacts or intentional misconduct to do unduly perturb the result.

While in theory, a "perfect" packet delivery inter-linked network could be contemplated, it is naïve and unreasonable to imply that any perfect real-world system exists, and that any prior art has, in fact, disclosed in an enabling manner such a perfect system. The present application addresses these limitations by providing a local server, proximate to the bidder (that is, e.g., connected either directly to the bidder's computer, or through a reliable and short latency network) which receives and preferably interactively defines the bid information, optionally changes a format of the bid information, and relays this to the central server. In the preferred declining price auction, the time of bid is critical, and in order to provide fairness and immunity from network impairments, the relevant time is considered the time of placement of the bid, not the time it is received. This time must be accurately reported and promptly received, so that the auction status remains accurate.

The local server implementation according to a preferred embodiment of the present application, compresses the data, which facilitates prompt transmission to the central server, and reduces the burden on the central server, which may receive multiple bids contemporaneously, and also provides authentication and a synchronized timestamp. Therefore, the limitations of the Internet, especially as known at the time of the invention, are generally overcome, and a reliable real time declining price auction can be conducted.

Claim 1 presents an auction method, comprising identifying at least one lot to be auctioned (Page 22, lines 3-4, Page 25, lines 19-21, Page 32, lines 20-22, Fig. 2 ref. 5), having a plurality of units and associated auction parameters (Page 19, line 5, Page 38, lines 24-29, Fig. 4, refs. 48, 43, 44, 21, 22); transmitting a remaining quantity of units within the lot over a network from a central server to a plurality of remote locations (Page 18, lines 24-27, Page 38, lines 7-9, Page 38, line 30-page 39, line 4, Fig. 8 refs. 105, 100); receiving bid identifications for

remaining units within the lot at the contemporaneous offering price from the plurality of remote locations over the network (Page 19, lines 26-29, Page 20, lines 12-16, Page 42, lines 19-24, Fig. 4 refs. 48, 49, Fig. 6 ref. 32, Fig. 8 ref. 100); and decrementing the offering price over time (Page 5, lines 25-29, Page 30, lines 16-26, Page 42, lines 18-19, Fig. 6 refs. 30, 32); wherein remaining quantity information and bid identification information are communicated between the central server and a plurality of local servers (Page 18, lines 24-31, Fig. 4 refs. 48, 43, Fig. 6 refs. 30, 31, 32, Fig. 8,), each local server communicating with at least one respective remote location (page 18, line 31-page 19, line 1, Page 21, lines 25-31, Fig. 8 refs. 101, 100) , each local server altering a format of information communicated between a remote location and the central server (Page 19, lines 9-25, Page 23, line 27-Page 24, line 22, Page 29, lines 15-20, Fig. 8 ref. 101).

Claim 2 provides that the local server (Fig. 8 ref. 101) comprises a rule database (Fig. 8 ref. 106), and requires that bid identifications transmitted to said central server (Fig. 8 ref. 110) conform to rules in said rule database (Page 19, lines 4-12, Page 21, lines 7-13, Page 25, lines 11-14, Fig. 8 ref. 106).

Claim 3 provides that information communicated between the central server and remote server is compressed (Page 18, lines 29-31).

Claim 4 provides that information is contained in a data packet comprising quantity remaining information for a plurality of lots (Page 19, lines 14-15, Page 28, lines 18-23, Page 29, lines 18-20).

Claim 5 provides that the local server (Fig. 8 ref. 101) and the central server (Fig. 8 ref. 111) communicate information in packets through a packet switched network (Page 24, lines 6-11, Page 38, lines 13-19, Fig. 8 ref. 103, 105, 112).

Claim 6 provides an auction method, comprising identifying at least one lot to be auctioned (Page 22, lines 3-4, Page 25, lines 19-21, lines 20-22, (Fig. 2, Fig. 3 ref. 15, Fig. 4 ref. 22), having a plurality of units within the lot and associated auction parameters (Page 19, line 5, Page 38, lines 24-29, Fig. 4 ref. 43); transmitting a remaining quantity of units within the lot

from a central server to a plurality of remote locations (Page 18, lines 24-27, Page 38, lines 7-9, Page 38, line 30-page 39, line 4, Fig. 8); receiving bid identifications for remaining units within the lot at the contemporaneous offering price from the plurality of remote locations by communicating between a set of users and a plurality remote servers at respective remote locations (Page 19, lines 26-29, Page 20, lines 12-16, Page 42, lines 19-24, Fig. 8, Fig. 4) to interactively define the bid identifications (Page 7, lines 25-27, Page 18, line 24-Page 19, line 8), and communicating the defined bid identifications between the remote location and the central server (Page 19, lines 26-29, Page 20, lines 12-16, Page 42, lines 19-24, Fig. 8) substantially without interactive communications directly between the user and the central server (Page 23, line 27-Page 28, line 22, Fig. 8 refs. 101, 104); and decrementing the offering price over time (Page 5, lines 25-29, Page 30, lines 16-26, Page 42, lines 18-19, Fig. 6 ref. 32).

Claim 7 provides that the remote server communicates with a user by means of a hypertext language protocol (Page 23, line 27-Page 25, line 10, Fig. 8 refs. 119, 112, 105, 103, 102).

Claim 8 provides an auction method, comprising (a) identifying at least one lot to be auctioned (Page 22, lines 3-4, Page 25, lines 19-21, Page 32, lines 20-22, Fig. 4 refs. 21, 22), having a plurality of units within the lot and associated auction parameters (Page 19, line 5, Page 38, lines 24-29, Fig. 4 ref. 43); (b) transmitting a remaining quantity of units within the lot from a central server to a plurality of remote locations (Page 18, lines 24-27, Page 38, lines 7-9, Page 38, line 30-page 39, line 4, Fig. 4, Fig. 8 refs. 118, 105, 102); (c) automatically maintaining synchronization of a clock at each remote location (Page 20, line 20-Page 21, line 6, Fig. 4 ref. 7) and receiving at the central server bid identifications for remaining units within the lot at the contemporaneous offering price associated with a time of bid identification from the plurality of remote locations (Page 19, lines 26-29, Page 20, lines 12-16, Page 42, lines 19-24, Fig. 8); (d) decrementing the offering price over time and decrementing the quantity of remaining units (Page 5, lines 25-29, Page 30, lines 16-26, Page 42, lines 18-19, Fig. 4 refs. 43, 48, Fig. 6 refs. 30, 31, 32), prioritizing award of units based on the time of bid identification (Page 19, line 26-Page 20, line 11, Page 25, lines 19-31, Page 27, lines 10-21, Page 28, lines 10-17), if received

within a bid time window (Page 19, line 31, Page 23, lines 19-21); and (e) storing a bid activity pattern in a database (Page 25, lines 27-29, Page 28, line 29-Page 29, line 2, Fig. 8 ref. 115).

Claim 9 provides that the stored bid pattern activity is analyzed to determine an optimal set of auction parameters for a subsequent auction of a similar lot (Page 22, line 16-Page 23, line 3, Page 30, lines 23-30).

Claim 10 provides that the price is decremented over time in a pattern adaptive to a bid activity pattern (Page 22, line 16-Page 23, line 3, Page 30, lines 23-30).

Claim 11 provides that the auction parameters define an auction starting price and parameters of an adaptive decrement algorithm (Page 22, line 16-Page 23, line 3, Page 30, lines 23-30).

Claim 12 provides that the auction is conducted according to a predetermined schedule (Page 28, lines 6-9, Page 30, lines 16-20, Fig. 2 ref. 5).

Claim 13 provides that the central server and the local server communicate using Internet Protocol packets (Page 30, lines 5-8, Fig. 8 refs. 110, 105, 103, 101), and the local server and the remote location communicate using Internet Protocol sockets (Page 30, lines 4-5, lines 9-15, Fig. 8 refs. 101, 103, 102), the local server translating a format of information communicated between the central server and the remote location (Page 19, lines 9-25, Page 23, line 27-Page 24, line 22, Page 29, lines 15-20, Fig. 8 refs. 103, 104, 101, 103, 102).

Claim 14 provides a method for conducting an auction, comprising the steps of identifying a plural quantity of subject for auction (Page 22, lines 3-4, Page 25, lines 19-21, Page 32, lines 20-22, Fig. 4 refs. 21, 22); specifying a temporal parameter for an auction, selected from the group consisting of starting time (Page 20, line 13), ending time (Page 20, lines 13-14, Fig. 4 ref. 7), time dilation rule (Page 30, lines 16-26), auction cessation rule (Page 20, lines 13-14, Page 31, lines 1-5), and time-price relationship (Page 30, lines 16-26, Page 31, lines 16-22); providing a seller yield management system to define a set of supply parameters, including non-

zero reserve and available quantity of subject (Page 39, lines 11, 19, 28-Page 40, line 4, Fig. 8 ref. 118); receiving buyer demand-utility function from a plurality of prospective buyers, each buyer demand-utility function defining the respective buyer's bid (Page 28, lines 1-5, Fig. 8 ref. 102, 113); over a period of time, generally relaxing a limiting restriction on acceptable transaction parameters for the subject (Page 30, lines 16-26, Page 31, lines 1-5, Fig. 6, ref. 30, 32), and prioritizing an award of a quantity of subject to a respective buyer based on a sequence of generation of bids (Page 19, line 26-Page 20, line 11, Page 25, lines 19-31, Page 27, lines 10-21, Page 28, lines 10-17), if received within a bid time window (Page 19, line 31, Page 23, lines 19-21), wherein the sequence is determined based on an automatically synchronized timebase (Page 20, line 20-Page 21, line 6, Fig. 4 ref. 20), which maximizes a seller utility (Page 4, line 28-Page 5, line 14); and ending the auction upon the earlier of an expiration of the auction (Fig. 4 ref. 7), exhaustion of available quantity (Page 31, lines 1-5, Fig. 4 ref. 43), or a surplus of the reserve over all prospective buyer's bids (Page 4, lines 9-18, Page 26, lines 22-23).

According to claim 15, the subject of the auction represents an airline ticket (Page 24, lines 23-29, Fig. 8 ref. 118).

According to claim 16, the specified temporal parameter comprises a starting time (Page 20, line 13, Fig. 5 ref. 7), and a declining price over time rule (Page 30, lines 16-26, Page 31, lines 16-22, Fig. 6 ref. 32).

According to claim 17, a buyer demand-utility function comprises a maximum bid price based on quantity of subject remaining (Page 26, lines 24-26, Fig. 6 ref. 30, 31, 32).

According to claim 18, a buyer demand-utility function comprises a non-uniform maximum bid price per incremental unit of subject available and a minimum quantity desired for purchase (Page 26, lines 24-31).

According to claim 19, a buyer demand-utility function is a function of subject quantity remaining (Page 26, lines 24-25, Fig. 6 ref. 32).

According to claim 20 the yield management system adaptively defines a quantity of subject for auction and a reserve price to optimize overall profits to seller (Page 4, line 28-Page 5, line 14, Fig. 8 ref. 118) based on time of auction (Page 12, lines 24-26), an inventory remaining prior to auction (Page 12, lines 13-24), and anticipated market conditions defining demand for the subject (Page 39, lines 28-Page 40, line 4).

Claim 21 provides a method for conducting a transaction, comprising the steps of: identifying a subject (Page 22, lines 3-4, Page 25, lines 19-21, Page 32, lines 20-22, Fig. 4 refs. 21, 22); specifying a set of rules relating to a transaction involving the subject (Page 19, lines 4-12, Page 21, lines 7-13, Page 25, lines 11-14); implementing the set of rules of transaction proximate to a client for ensuring compliance with each of said rules (Page 19, lines 4-5, Fig. 8 refs. 104, 106); efficiently communicating transaction information from the client to a server complying with said rules (Page 18, line 20-Page 20, line 5, Fig. 8 ref. 100, 105, 110); and receiving, at said server, transaction information from a client (Page 18, line 20-Page 20, line 5, Fig. 8 ref. 111).

Claim 22 provides that the rules provide for temporal variations in permissible transaction parameters (Page 22, line 16-Page 23, line 10, Page 30, lines 16-30).

Claim 23 provides that the rules define an auction (Page 30, lines 16-20, Fig. 4 ref. 5, Fig. 8 ref. 110).

Claim 24 provides that the rules define a descending price auction (Page 30, lines 16-26, Fig. 6 ref. 32) for multiple subjects (Page 28, lines 18-23, Fig. 6 ref. 31).

Claim 25 provides that the subject is a travel ticket (Page 29, line 1, Fig. 3 ref. 15).

Claim 26 provides that the subject is a round trip airline ticket, wherein the rules implement stopover restrictions (Page 24, line 24, Fig. 3 refs. 8, 9, 13, 14).

Claim 27 provides that the rules prevent inconsistent itineraries (Page 25, lines 16-18).

Claim 28 provides that the transaction information is transmitted from the client to the server as compressed information in an information packet (Page 18, lines 29-31, Page 24, lines 6-11, Page 38, lines 13-19, Fig. 8 ref. 105).

Claim 29 provides that the client and server communicate through the Internet (Page 19, lines 17-19, Fig. 8 ref. 105).

Claim 30 further provides the step of transmitting information from the server to the client relating to the subject, as a parameter for implementation of the rules (Page 18, line 24-Page 19, line 8, Page 38, line 7-Page 39, line 4, Fig. 8 refs. 110, 105, 110, 104, 106).

Claim 31 provides the step of altering a number of available subjects for transaction over time (Page 39, line 28-Page 40, line 4, Fig. 6 ref. 31).

Claim 32 provides that the rules comprise a starting time (Page 28, lines 6-9, Page 30, lines 16-20, Fig. 5 ref. 25, 7), and a declining price over time (Page 22, line 16-Page 23, line 3, Page 30, lines 23-30, Fig. 6 ref. 32).

Claim 33 provides that the transaction information comprises a buyer demand-utility function (Page 26, lines 24-26, Page 28, lines 1-5, Fig. 6 refs. 30, 31, 32, Fig. 8 ref. 113).

Claim 34 provides that the buyer demand-utility function comprises a non-uniform maximum bid price per incremental unit of subject available and a minimum quantity desired for purchase (Page 26, lines 24-31).

Claim 35 provides that the rules implement a yield management system (Page 39, lines 11, 19, 28-Page 40, line 4, Fig. 8 ref. 106).

Claim 36 provides that the server transmits parameters to the client for implementation of a yield management system (Page 39, line 28-Page 40, line 9, Fig. 8 refs. 118, 116, 115, 119, 111, 105, 103, 104, 106, 101).

Claim 37 provides that the server identifies a quantity of subject available for transaction (Page 22, lines 3-4, Page 25, lines 19-21, Page 32, lines 20-22, Fig. 4 ref. 43) and a minimum price of transaction (Page 39, lines 11, 19, 28-Page 40, line 4, Fig. 4 ref. 48, Fig. 6 ref. 32) using an airline ticket yield management system to optimize overall profits to seller (Page 4, line 28-Page 5, line 14, Fig. 8 ref. 118) based on chronology (Page 20, lines 13-14, Page 30, lines 16-26, Page 31, lines 1-5, Page 31, lines 16-22), an inventory of subject remaining (Page 39, lines 11, 19, 28-Page 40, line 4), and anticipated market conditions defining demand for the subject (Page 39, lines 28-Page 40, line 4).

(vi) Grounds of rejection to be reviewed on appeal. A concise statement of each ground of rejection presented for review.

1. Claims 1-37 are rejected under 35 USC 103(a) as being obvious over Friedland et al. in view of Alaia (US 6,230,146).

(vii) Argument.

The rejection of claims 1-37 under 35 USC 103(a) as being obvious over Friedland et al. (US 6,339,601) in view of Alaia et al. (US 6,230,146) is respectfully appealed.

Friedland et al. relates to a "Distributed Live Auction" conducted over the Internet (Abstract), in which intermediary nodes collect, filter, and forward bid data from auction participants to the auctioneer.

Alaia et al. relates to a method and system for controlling closing times of electronic auctions involving multiple lots.

It is initially noted that the Supreme Court in KSR Int'l v. Teleflex, 550 U.S. ____ (2007)(slip op. at p. 14) states that an analysis concluding obviousness must be explicit and not conclusory. (To facilitate review, this analysis should be made explicit. See In re Kahn, 441 F. 3d 977, 988 (CA Fed. 2006) ("[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness").) It is respectfully submitted that for many claims, this required analysis is absent.

CLAIMS 1 AND 5

Claims 1 and 5 is distinguished from the references by at least "decrementing the offering price over time; wherein remaining quantity information and bid identification information are communicated between the central server and a plurality of local servers, each local server communicating with at least one respective remote location, each local server altering a format of information communicated between a remote location and the central server." The relevant disclosure of Friedland et al. relating to a multiple-unit auction is found at Col. 18, lines 3-47, which itself corresponds to a Yankee (ascending price) auction format. This is clear from Col. 17, lines 14-30, which state:

> Also in step 1504, the collector/redistributor checks the bid amount contained in the bid field of the bid message against the current high bid received for the identified lot of the identified auction. Only if the bid is higher than the current highest bid for the identified auction, as detected by the collector/redistributor from bid messages received from other remote bidders or from status messages received from the DLA auction server, will the collector/redistributor forward the bid on to the DLA auction server. If the bid is valid and represents a higher bid, as detected in step 1506, the collector/redistributor submits the bid to either a next-highest-level collector/redistributor or to the DLA auction server in step 1508, after which the collector/redistributor continues to wait for another event. On the other hand, if the bid does not pass the filter, as detected in step 1506, the collector/redistributor simply resumes waiting for another event.

While Friedland et al. does elsewhere mention a Dutch (declining price) auction at Col. 2, lines 6-11, this is not relevant to the multiple unit auction disclosure with collector/redistributor nodes encompassed by the teachings of Friedland et al., and Friedland et al. do not enable a declining price auction employing such intermediaries. Indeed, due to the alleged advantages of the filtering function implemented by the collector/redistributor, Friedland et al. teaches *away* from the present invention, since in the declining price auction all bids are accepted until the inventory is exhausted, so that no reduction in data traffic during the actual conduct of the auction can be effected, and thus the purported efficiencies of the collector/redistributor in terms of reducing data flow to the central server are insignificant. After inventory is exhausted, the filtering function is not terribly useful, since no bids will be accepted.

Claim 1, on the other hand, provides that "each local server alter[s] a format of information communicated between a remote location and the central server", and thus the respective central server may be unburdened from receiving information in a form exactly as presented by the bidder. In this case, all bids are conveyed to the central server, until the auction ends. Since the function of the local server of the present application and the collector/redistributor of Friedland et al. are antithetical, and intentionally so, there is no teaching or suggestion in the references or the art as a whole to implement the substantial modifications necessary to meet the present claim scope. As stated above, Friedland et al. is also not enabled to practice the present methods.

Thus, the method according to the present claim 1 is distinct from the references, and the claim is patentable in view thereof.

CLAIM 2

Claim 2 provides that the local server comprises a rule database, and requires that bid identifications transmitted to the central server conform to rules in said rule database. The Examiner admits that Friedland et al. fails to disclose this limitation, and relies on Alaia et al. which allegedly discloses "decision rules". However, Alaia et al. disclose only a client and server (Auction coordinator), and not a local server component, and do not teach, suggest or enable the implementation of a local server component which implements rules stored in a rule database. See, Col. 26, lines 16-18. Therefore, the rejection fails to present a prima facie case of

obviousness. Even were one to employ the "decision rules" of Alaia et al. in the collector/redistributor of Friedland et al., this still would not render the claim obvious, since there is no disclosure of a rule database at the local server level.

CLAIM 3

Claim 3 provides that the information communicated between the central server and remote server is compressed. While the Examiner alleges that data compression is well known and provides well known advantages, this ignores the fact that in a standard web browser-web server system architecture, the available web browsers typically require a secondary process to compress the data, which introduces incompatibilities and installation issues. Therefore, the art teaches that, so long as the data will fit within a standard TCP/IP packet, or a reasonable number of such packets, that the browser should leave the data uncompressed, and communicated through the normal hypertext transport protocol (HTTP). On the other hand, the present application teaches that a local server may serve a number of bidders, and a number of concurrent auctions, and therefore it may be useful to compress the data for a single bid even if it could otherwise be efficiently transmitted alone. Friedland et al., on the other hand, teach that the collector/redistributor reduces data flow by filtering, and not by compressing. While these are not mutually exclusive, because the data flow from the collector/redistributor is reduced, there is no particular motivation to further process the data, which must then be decompressed for use by the live bidder in the auction contemplated by Friedland et al.

CLAIM 4

Claim 4 provides that information is contained in a data packet comprising quantity remaining information for a plurality of lots. Neither Friedland et al. nor Alaia et al. disclose that quantity information for a plurality of lots is contained in a common data packet. Rather, it is inferred that this information is communicated in separate packets, since this avoids the need for complex decoding and parsing. In any case, neither reference provides the affirmative teaching required to render the claim obvious.

CLAIM 6 AND 7

Claims 6 and 7 distinguished the references by at least "receiving bid identifications for remaining units within the lot at the contemporaneous offering price from the plurality of remote locations by communicating between a set of users and a plurality remote servers at respective remote locations to interactively define the bid identifications, and communicating the defined bid identifications between the remote location and the central server substantially without interactive communications directly between the user and the central server; and decrementing the offering price over time." The relevant disclosure of Friedland et al. relating to a multiple-unit auction is found at Col. 18, lines 3-47, which itself corresponds to a Yankee (ascending price) auction format. This is clear from Col. 17, lines 14-30, copied above. While Friedland et al. does elsewhere mention a Dutch (declining price) auction at Col. 2, lines 6-11, this is not relevant to the multiple unit auction disclosure encompassed by the teachings of Friedland et al., and Friedland et al. do not enable such an auction as presently claimed. Friedland et al. specifically do not teach or suggest an interactive collector/redistributor, and therefore the necessary corresponding teaching to support the rejection is completely absent.

The Examiner has indicated that claim 6 encompasses a "statement of intended use" without a "structural difference". However, as a method claim, no such linguistic formulation is present, and the affirmatively stated function represents a valid distinction from the art. This step requires an interactive relationship between the users and remote servers, a relationship not taught or suggested by the art. That is, neither Friedland et al. nor Alaia et al. teach or suggest that the local server itself responds to the user, but rather that it "serves to efficiently collect and filter bids from a large number of remote bidders and pass potentially winning bids onto the auction server, and also to serve to efficiently broadcast status messages concerning the live auction received from auction server to a large number of remote client programs running on remote computers." Friedland et al., Col. 3, lines 24-29. In the present case, "interactively" means that the local server itself generates a response to the user without requiring a separate communication for the purpose of defining that response with the central server.

It is respectfully submitted that, in accordance with any reasonable an appropriate definition of "interactive" or its associated adverb, "interactively", claim 6 distinguishes the art. Claim 6 requires that there be an interactive communication between the remote locations and set of users. According to Friedland et al., the "collector/redistributor nodes are heirarchically

interconnected and serve to efficiently collect and filter bids from a large number of remote bidders and pass potentially winning bids onto the auction server, and also serve to efficiently broadcast status messages concerning the live auction received from the auction server to a large number of remote client programs running on remote computers." Col. 3, lines 23-29. There is no teaching or suggestion that the communication between user and collector/redistributor nodes is interactive or, other than selectively blocking or passing the bids, there is any change to the information communicated.

Thus, the method according to the present claims 6 and 7 are distinct from the references, and the claim is patentable in view thereof.

CLAIMS 8, 10, and 12

Claims 8, 10 and 12 are distinguished from the references by at least "automatically maintaining synchronization of a clock at each remote location and receiving at the central server bid identifications for remaining units within the lot at the contemporaneous offering price associated with a time of bid identification from the plurality of remote locations; decrementing the offering price over time and decrementing the quantity of remaining units, prioritizing award of units based on the time of bid identification, if received within a bid time window…"

The relevant disclosure of Friedland et al. relating to a multiple-unit auction is found at Col. 18, lines 3-47, which itself corresponds to a Yankee (ascending price) auction format. This is clear from Col. 17, lines 14-30, copied above. While Friedland et al. does elsewhere mention a Dutch (declining price) auction at Col. 2, lines 6-11, this is not relevant to the multiple unit auction disclosure encompassed by the teachings of Friedland et al., and Friedland et al. do not enable such an auction as presently claimed.

Friedland et al. specifically do not teach or suggest that any clock synchronization is necessary, since the bids are received in "real time" at a live auction, and the relevant time is the time of bid presentation by the proxy at the live auction. Therefore, the timestamp of a bid is irrelevant, since it is only the information that actually makes it to the live proxy bidder in time to take action that matters.

Alaia et al. likewise do not address the issue of clock synchronization issues.

Thus, the method according to the present claims 8, 10 and 12 are distinct from the references, and the claims are patentable in view thereof.

CLAIM 9

Claim 9 provides that the stored bid pattern activity is analyzed to determine an optimal set of auction parameters for a subsequent auction of a similar lot. There appears to be no well-reasoned rejection of claim 9 of record. However, applicants note that the references apparently do not address bid pattern activity.

CLAIM 11

Claim 11 provides that the auction parameters define an auction starting price and parameters of an adaptive decrement algorithm. There appears to be no well-reasoned rejection of claim 11 of record. However, applicants note that the references apparently do not address an adaptive decrement algorithm having supplied auction parameters.

CLAIM 13

Claim 13 is distinguished from the references by at least "the local server translating a format of information communicated between the central server and the remote location". This is similar to the distinction from the art drawn with respect to claim 1, but is argued separately since the claims have different dependencies.

Due to the alleged advantages of filtering function of the collector/redistributor, Friedland et al. teaches *away* from the present invention, since in the declining price auction all bids are accepted until the inventory is exhausted, so that no reduction in data traffic is effected during the critical part of the auction, and thus the purported efficiencies of the collector/redistributor gained through bid filtering of non-winning bids are insignificant. After inventory is exhausted, the filtering function is not terribly useful, since no bids will be accepted at that time anyway. According to claim 13, the central server may be unburdened from receiving information exactly as presented by the bidder. In this case, all bids are conveyed to the central server, until the auction ends (e.g., the inventory is exhausted, the reserve is not met, etc.). Since the function of the local server of the present application and the collector/redistributor of Friedland et al. are in a sense "opposite", and intentionally so, there is no teaching or suggestion in the references or the art as a whole to implement the substantial modifications necessary to meet the present claim scope. Friedland et al. is also not enabled to practice the present method.

CLAIM 14 AND 16

Claims 14 and 16 provide a method for conducting an auction, comprising the steps of: identifying a plural quantity of subject for auction; specifying a temporal parameter for an auction, selected from the group consisting of starting time, ending time, time dilation rule, auction cessation rule, and time-price relationship; providing a seller yield management system to define a set of supply parameters, including non-zero reserve and available quantity of subject; receiving buyer demand-utility function from a plurality of prospective buyers, each buyer demand-utility function defining the respective buyer's bid; over a period of time, generally relaxing a limiting restriction on acceptable transaction parameters for the subject, and prioritizing an award of a quantity of subject to a respective buyer based on a sequence of generation of bids, if received within a bid time window, wherein the sequence is determined based on an automatically synchronized timebase, which maximizes a seller utility; and ending the auction upon the earlier of an expiration of the auction, exhaustion of available quantity, or a surplus of the reserve over all prospective buyer's bids.

The Examiner has provided no well-reasoned basis for rejecting this claim. However, he indicates that the word "if" renders the claim indefinite, and thus rejectable on the art. This is not the case, since a method may permissibly include conditional statements, of which the word "if" is an indicator. Indeed, this does not represent an optional step, but a conditional response to an externality, which is properly and affirmatively stated in the claim. Even were one to ignore the clause addressed by the Examiner (which was not made subject of a rejection under 35 U.S.C. § 112), the Examiner has not demonstrated that the references teach synchronization of a timebase, or for that matter, the existence of any relevant "timebase" in the references.

Friedland et al. specifically do not teach or suggest that any clock synchronization is necessary, since the bids are received in "real time" at a live auction, with the relevant time being the time of bid by the proxy, not the time of bid by the bidder. Bids are processed by the collector/redistributor in the order received as well. Therefore, the timestamp of a bid is irrelevant, since it is only the information that actually makes it to the live proxy bidder in time to take action that matters. Alaia et al. likewise do not address the issue of clock synchronization issues. Thus, the method according to the present claim 14 is distinct from the references and the claim is patentable in view thereof.

CLAIM 15

Claim 15 provides that the subject of the auction represents an airline ticket. There is no well-reasoned rejection of this claim. However, applicants note that, as described in the specification, airline tickets have particular properties which render them distinct from other kinds of goods and services, for example the availability of airline tickets is typically managed by a yield management system.

CLAIM 17

Claim 17 provides that a buyer demand-utility function comprises a maximum bid price based on quantity of subject remaining. There is no well-reasoned rejection of claim 17. However, applicants note that the function defines a variable price dependent on quantity, a concept not taught or suggested by the references.

CLAIM 18

Claim 18 provides that a buyer demand-utility function comprises a non-uniform maximum bid price per incremental unit of subject available and a minimum quantity desired for purchase. There is no well-reasoned rejection of claim 18, however, it is noted that the received buyer demand-utility function is, at least in this case, not a simple monetary value, but rather a changing value, a concept which is not taught or suggested in the references.

CLAIM 19

Claim 19 provides that a buyer demand-utility function is a function of subject quantity remaining. There is no well-reasoned rejection of claim 19, however, it is noted that the received buyer demand-utility function is, at least in this case, not a simple monetary value, but rather a changing value, a concept which is not taught or suggested in the references.

CLAIM 20

Claim 20 provides that the yield management system adaptively defines a quantity of subject for auction and a reserve price to optimize overall profits to seller based on time of auction, an inventory remaining prior to auction, and anticipated market conditions defining demand for the subject. There is no well-reasoned rejection of claim 20, however, it is noted that

neither of the applied references discloses a yield management system and its adaptive interaction with the quantity of subject available for auction.

CLAIM 21, 23, 29, 30, 31 AND 33

Claim 21 is distinguished from the references by at least "implementing the set of rules of transaction proximate to a client for ensuring compliance with each of said rules; efficiently communicating transaction information from the client to a server complying with said rules". While not specifically addressed, the Examiner apparently admits that Friedland et al. fails to disclose this limitation, and apparently relies on Alaia et al., which allegedly discloses "decision rules". Alaia et al. discloses a client and server (Auction coordinator), and that the "rules" may be implemented at the client. See, Col. 26, lines 16-18. However, there is no particular efficiency in the communication between client and server, and the system of Alaia et al. filter bids which are precluded, and thus do not efficienctly communicate the transaction information which is filtered.

CLAIM 22

Claim 22 provides that the rules provide for temporal variations in permissible transaction parameters. There is no well-reasoned rejection of claim 22. However, applicants note that there is no disclosure in Alaia et al. that the "failsafe rules" can change over time. While the "decision rules" can change over time, these are apparently implemented remote from the client, and therefore are distinguished.

CLAIM 24 AND 32

Claim 24 (and similarly 32) provide that the rules define a descending price auction for multiple subjects. The relevant disclosure of Friedland et al. relating to a multiple-subject auction is found at Col. 18, lines 3-47, which itself corresponds to a Yankee (ascending price) auction format, see Col. 17, lines 14-30. While Friedland et al. does elsewhere mention a Dutch (declining price) auction at Col. 2, lines 6-11, this is not relevant to the multiple unit auction disclosure encompassed by the teachings of Friedland et al., and Friedland et al. do not enable such an auction as presently claimed. Friedland et al. specifically do not teach, suggest or

provide an enabling disclosure of a descending price auction, and therefore the necessary corresponding teaching to support the rejection is completely absent.

CLAIM 25

Claim 25 provides that the subject is a travel ticket. There is no well-reasoned rejection of this claim. However, applicants note that, as described in the specification, travel tickets have particular properties which render them distinct from other kinds of goods and services, for example the availability of travel tickets is typically managed by a yield management system.

CLAIM 26

Claim 26 provides that the subject is a round trip airline ticket, wherein the rules implement stopover restrictions. There is no well-reasoned rejection of this claim. However, it is clear that the stated stopover restrictions are nowhere found in the references, and lead to significant logic to be implemented proximate to the client.

CLAIM 27

Claim 27 provides that the rules prevent inconsistent itineraries. There is no well-reasoned rejection of this claim. However, it is clear that the stated prevention of inconsistent itineraries is nowhere found in the references, and lead to significant logic to be implemented proximate to the client.

CLAIM 28

Claim 28 provides that the transaction information is transmitted from the client to the server as compressed information in an information packet. While the Examiner alleges that data compression is well known and provides well known advantages, this ignores the fact that in a standard web browser-web server architecture, the web browser requires a secondary process to compress the data, which introduces incompatibilities and installation issues. Therefore, the art teaches that browsers communicate with servers over uncompressed channels for compatibility and simplicity. On the other hand, the present application teaches that a local server may serve a number of bidders, and a number of concurrent auctions, and therefore it may be useful to compress the data for a single bid even if it could otherwise be efficiently transmitted alone. In

any case, the communication between the local server and the central server is not generally intended to provide a browser interface, and therefore compatibility is not an issue. Friedland et al., on the other hand, teach that the collector/redistributor reduces data flow by filtering, and not by compressing, while the source and destination are both live humans. While these are not mutually exclusive, because the data flow from the collector/redistributor is reduced, there is no particular motivation to further process the data, which must then be decompressed for use by the live bidder in the auction contemplated by Friedland et al.

CLAIM 34

Claim 34 provides that a buyer demand-utility function comprises a non-uniform maximum bid price per incremental unit of subject available and a minimum quantity desired for purchase. No well-reasoned rejection of this claim is presented. However, it is noted that the most pertinent disclosure of Alaia et al. appears to be:

> Flexible bidder-determined line item decision rules for bidding permits bidders to set specific price decision rules for aspects of individual line items within a lot. For example, price limits for line items can be established at the initial price quote entered for that item or at a floor or ceiling above or below the initial quote. Different decision rules can be set for different items and rules can be set across some or all of the line items within a lot. Decision rules can be set dynamically during the course of the bidding event by the bidder.
>
> Flexible line-item decision rules enable bidders to lock-in a fixed and variable portion of the price quote prior to the bid. Total bids for a lot can then be adjusted rapidly in response to market activity without changing individual line item quotes to uneconomic levels. In addition, bidders have the comfort of setting floors or ceilings on individual or cost component bids. During the bidding event, fixed components can be reevaluated and unlocked if necessary in response to movements in the market beyond original expectations. This bidding flexibility allows bidders to participate in the auction fully, and increases competition.
>
> Col. 9, line 56-Col. 10, line 9

This disclosure fails to or teach or suggest the claim limitation.

CLAIM 35

Claim 35 provides that the rules implement a yield management system. There is no well-reasoned rejection of claim 35, however, it is noted that neither of the applied references discloses a yield management system.

CLAIM 36

Claim 36 provides that the server transmits parameters to the client for implementation of a yield management system. There is no well-reasoned rejection of claim 36, however, it is noted that neither of the applied references discloses a yield management system which is implemented by transmission of parameters from the server to the client.

CLAIM 37

Claim 37 provides that the server identifies a quantity of subject available for transaction and a minimum price of transaction using an airline ticket yield management system to optimize overall profits to seller based on chronology, an inventory of subject remaining, and anticipated market conditions defining demand for the subject. There is no well-reasoned rejection of this claim. However, it is noted that the references do not teach or suggest a yield management system of the type specified.

It is therefore respectfully submitted that the invention, as claimed, is patentable, and the rejections should be reversed.

Respectfully submitted,

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(viii) Claims appendix. An appendix containing a copy of the claims involved in the appeal.

1. An auction method, comprising:

(a) identifying at least one lot to be auctioned, having a plurality of units and associated auction parameters;

(b) transmitting a remaining quantity of units within the lot over a network from a central server to a plurality of remote locations;

(c) receiving bid identifications for remaining units within the lot at the contemporaneous offering price from the plurality of remote locations over the network; and

(d) decrementing the offering price over time; wherein remaining quantity information and bid identification information are communicated between the central server and a plurality of local servers, each local server communicating with at least one respective remote location, each local server altering a format of information communicated between a remote location and the central server.

2. The auction method according to claim 1, wherein said local server comprises a rule database, and requires that bid identifications transmitted to said central server conform to rules in said rule database.

3. The auction method according to claim 1, wherein information communicated between the central server and remote server is compressed.

4. The auction method according to claim 1, wherein information is contained in a data packet comprising quantity remaining information for a plurality of lots.

5. The auction method according to claim 1, wherein the local server and the central server communicate information in packets through a packet switched network.

6 An auction method, comprising:

(a) identifying at least one lot to be auctioned, having a plurality of units within the lot and associated auction parameters;

(b) transmitting a remaining quantity of units within the lot from a central server to a plurality of remote locations;

(c) receiving bid identifications for remaining units within the lot at the contemporaneous offering price from the plurality of remote locations by communicating between a set of users and a plurality remote servers at respective remote locations to interactively define the bid identifications, and communicating the defined bid identifications between the remote location and the central server substantially without interactive communications directly between the user and the central server; and

(d) decrementing the offering price over time.

7. The method according to claim 6, wherein the remote server communicates with a user by means of a hypertext language protocol.

8. An auction method, comprising:

(a) identifying at least one lot to be auctioned, having a plurality of units within the lot and associated auction parameters;

(b) transmitting a remaining quantity of units within the lot from a central server to a plurality of remote locations;

(c) automatically maintaining synchronization of a clock at each remote location and receiving at the central server bid identifications for remaining units within the lot at the contemporaneous offering price associated with a time of bid identification from the plurality of remote locations;

(d) decrementing the offering price over time and decrementing the quantity of remaining units, prioritizing award of units based on the time of bid identification, if received within a bid time window; and

(e) storing a bid activity pattern in a database.

9. The auction method according to claim 8, wherein the stored bid pattern activity is analyzed to determine an optimal set of auction parameters for a subsequent auction of a similar lot.

10. The auction method according to claim 9, wherein the price is decremented over time in a pattern adaptive to a bid activity pattern.

11. The auction method according to claim 10, wherein the auction parameters define an auction starting price and parameters of an adaptive decrement algorithm.

12. The auction method according to claim 10, wherein the auction is conducted according to a predetermined schedule.

13. The auction method according to claim 8, wherein the central server and the local server communicate using Internet Protocol packets, and the local server and the remote location communicate using Internet Protocol sockets, the local server translating a format of information communicated between the central server and the remote location.

14. A method for conducting an auction, comprising the steps of:

identifying a plural quantity of subject for auction;

specifying a temporal parameter for an auction, selected from the group consisting of starting time, ending time, time dilation rule, auction cessation rule, and time-price relationship;

providing a seller yield management system to define a set of supply parameters, including non-zero reserve and available quantity of subject;

receiving buyer demand-utility function from a plurality of prospective buyers, each buyer demand-utility function defining the respective buyer's bid;

over a period of time, generally relaxing a limiting restriction on acceptable transaction parameters for the subject, and prioritizing an award of a quantity of subject to a respective buyer based on a sequence of generation of bids, if received within a bid time window, wherein the sequence is determined based on an automatically synchronized timebase, which maximizes a seller utility; and

ending the auction upon the earlier of an expiration of the auction, exhaustion of available quantity, or a surplus of the reserve over all prospective buyer's bids.

15. The method according to claim 14, wherein the subject of the auction represents an airline ticket.

16. The method according to claim 14, wherein the specified temporal parameter comprises a starting time, and a declining price over time rule.

17. The method according to claim 14, wherein a buyer demand-utility function comprises a maximum bid price based on quantity of subject remaining.

18. The method according to claim 14, wherein a buyer demand-utility function comprises a non-uniform maximum bid price per incremental unit of subject available and a minimum quantity desired for purchase.

19. The method according to claim 14, wherein a buyer demand-utility function is a function of subject quantity remaining.

20. The method according to claim 14, wherein the yield management system adaptively defines a quantity of subject for auction and a reserve price to optimize overall profits to seller based on time of auction, an inventory remaining prior to auction, and anticipated market conditions defining demand for the subject.

21. A method for conducting a transaction, comprising the steps of:

identifying a subject;

specifying a set of rules relating to a transaction involving the subject;

implementing the set of rules of transaction proximate to a client for ensuring compliance with each of said rules;

efficiently communicating transaction information from the client to a server complying with said rules; and

receiving, at said server, transaction information from a client.

22. The method according to claim 21, wherein the rules provide for temporal variations in permissible transaction parameters.

23. The method according to claim 21, wherein the rules define an auction.

24. The method according to claim 21, wherein the rules define a descending price auction for multiple subjects.

25. The method according to claim 21, wherein the subject is a travel ticket.

26. The method according to claim 25, wherein the subject is a round trip airline ticket, wherein the rules implement stopover restrictions.

27. The method according to claim 21, wherein the rules prevent inconsistent itineraries.

28. The method according to claim 21, wherein the transaction information is transmitted from the client to the server as compressed information in an information packet.

29. The method according to claim 21, wherein the client and server communicate through the Internet.

30. The method according to claim 21, further comprising the step of transmitting information from the server to the client relating to the subject, as a parameter for implementation of the rules.

31. The method according to claim 21, further comprising the step of altering a number of available subjects for transaction over time.

32. The method according to claim 21, wherein the rules comprise a starting time, and a declining price over time.

33. The method according to claim 21, wherein the transaction information comprises a buyer demand-utility function.

34. The method according to claim 33, wherein a buyer demand-utility function comprises a non-uniform maximum bid price per incremental unit of subject available and a minimum quantity desired for purchase.

35. The method according to claim 25, wherein the rules implement a yield management system.

36. The method according to claim 25, wherein the server transmits parameters to the client for implementation of a yield management system.

37. The method according to claim 21, wherein the server identifies a quantity of subject available for transaction and a minimum price of transaction using an airline ticket yield management system to optimize overall profits to seller based on chronology, an inventory of subject remaining, and anticipated market conditions defining demand for the subject.

(ix) Evidence appendix.

Not Applicable.

(x) Related proceedings appendix.

Not Applicable. No decisions rendered by a court or the Board in any proceeding identified pursuant to paragraph (c)(1)(ii) of 37 C.F.R. 41.37 are believed to exist.

VOYAGER 201A

ASSIGNMENT

FOR VALUABLE CONSIDERATION, THE RECEIPT AND ADEQUACY OF WHICH IS HEREBY ACKNOWLEDGED,

I Willem Daman

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AND

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hereby sell, assign, and transfer unto Quik Auctions, Inc., a corporation of Delaware, located at 1300 West State Road 434, Suite 300, Longwood, Florida 32750, its successors, assigns and designees, the entire right, title, and interest in and to my/our application for Letters Patent of the United States,

[x] executed concurrently herewith
[ ] was filed on _ as Application Serial No _

entitled REAL TIME ELECTRONIC COMMERCE TELECOMMUNICATION SYSTEM AND METHOD

and my/our entire right, title, and interest in and to all my/our inventions, whether joint or sole, disclosed in said application for Letters Patent, and in and to all regular utility applications, divisional or continuation applications or continuation-in-part applications that may be filed for United States Letters Patent for any of said inventions, or any patent application inside or outside the United States claiming benefit of priority of this application and in and to all patents that may be granted on the foregoing applications, and I/we hereby agree, whenever requested, to communicate to said assignee, its successors and assigns, any facts known to my/us respecting said inventions and to execute all applications or papers necessary to obtain and maintain proper patent protection on said inventions.

Date	Inventor(s)
1/28/00	W Daman Willem Daman
1/28/00	James A McInnes James A. McInnes

Appendix A